

lopement of the entire plumage. The bird avoided the water for a few days before it began to moult, and also after it had renewed its feathers; it soon, however, became lively, its eyes assumed their usual form and brightness, it took freely to the water, in which it passed the greater part of the day. Its movements in the water when swimming, diving, and pursuing fish were most extraordinary; it seemed, as it were, to fly under water, using its flipper-like wings after the fashion of a Seal.

The Penguin appears so much at home in the water, so perfectly adapted to an aquatic life, that one would conclude that, but for the necessity of breeding and moulting, this bird would be far more at home on the ocean than in passing even a short period on land, being so ill-adapted in form for travelling on shore.

2. On a Collection of Birds made by Mr. Hübner on Duke-of-York Island and New Britain. By OTTO FINSCH, Ph.D. C.M.Z.S.

[Received November 20, 1878.]

From the Museum Godeffroy at Hamburg I have received a collection of the birds of Duke-of-York Island and the adjoining parts of New Britain, sent over by Mr. Hübner. Although through the zealous efforts of the Rev. George Brown, we are pretty well acquainted with the fauna of Duke-of-York Island, especially with its ornithology, on which Dr. Sclater has published some valuable papers, I think the following paper will form a not uninteresting contribution to our knowledge.

The present collection contains 52 species from Duke-of-York Island, and 7 from New Britain, 14 being new to the former group, namely *Haliaëtus leucogaster*, *Hirundo javanica*, *Cuculus canorus*, *Scythrops novæ-hollandiæ*, *Macropygia doreya*, *Strepsilas interpres*, *Esacus magnirostris*, *Sterna bergii*, *St. longipennis*, *Procellaria neglecta*, *Pr. leucoptera*, *Puffinus leucomelas*, *P. tenuirostris*, and *Dysporus sula*.

Except the native names, Mr. Hübner has given me no notices; I therefore can only copy these, reminding you that the pronunciation of them is according to the German language.

From Duke-of-York Island.

1. PANDION LEUCOCEPHALUS, Gould.

P. haliaëtus, Scl. Proc. Zool. Soc. 1877, p. 108.

Native name *Teringau*, Hübner.

Male and female of this apparently constantly smaller species or race of our common Osprey.

1 "On the Birds collected by Mr. George Brown on the Duke-of-York Island, and on the adjoining parts of New Ireland and New Britain," P. Z. S. 1877, pp. 96-114; on a second collection, ib. 1878 p. 289; and on a third, ib., p. 670.

2. *HALIAËTUS LEUCOGASTER* (Gm.).

Native name *Manigulai*, Hübner.

One male. This widely distributed species is not mentioned in Dr. Sclater's list of the birds of Duke-of-York Island.

3. *HALIASTUR GIRRENERA* (Vieill.); Sclat. *l. c.* p. 109.

Native name *Bakubukup*; iris brown; feeds on lizards, Hübner.
Two old birds (male and female) and a young one.

4. *DENDROCHELIDON MYSTACEA* (Less.); Scl. *l. c.* p. 105.

Native name *Netin*, Hübner.
Male and female.

5. *HIRUNDO JAVANICA*, Sparrm.

Native name *Pinipinagra*, Hübner.

One male. It agrees well with a Javan specimen; but the underparts are of a little darker brownish, and the outermost tail-feather shows only a pale indication of the white cross band on the inner web, so well marked in the Javan bird.

6. *EURYSTOMUS CRASSIROSTRIS*, Scl. *l. c.* p. 106.

Native name *Kalangbabareta*, Hübner.
One specimen (female).

7. *ALCEDO MOLUCCENSIS*, Bl.; Scl. *l. c.* p. 105.

Native name *Nangia*, Hübner.
One old and one young bird.

8. *HALCYON SANCTUS*, Vig. & Horsf.; Scl. *l. c.* p. 105.

Native name *Ganare*, Hübner.
Male and female.

9. *HALCYON SAUROPHAGUS*, Gould.

H. albicilla, Scl. *l. c.* p. 105.

Native name *Kenetam*, Hübner.
One female, with white head and underparts, like the male.

10. *TANYSIPTERA NIGRICEPS*, Scl. *l. c.* p. 105.

Native name *Loklakaulia*, Hübner.
One specimen corresponding exactly with Dr. Sclater's description.

11. *MEROPS ORNATUS*, Lath.; Scl. *l. c.* p. 105.

One specimen.

12. *NECTARINIA ASPASIA*, Less.; Scl. *l. c.* p. 102.

Native name *Nalange*, Hübner.

Two old males; the crown of one of a golden green, of the other more steel-green, and nearly the same as the metallic-green of the rump; one shows some pale yellow feathers on the vent, no doubt remnants of the young plumage; and one female.

13. *NECTARINIA FRENATA*, S. Müll.; *Sci. l. c.* p. 103.

Native name *Nalange-labuan*, Hübner.

One male.

14. *PHILEMON COCKERELLI*, *Sci.*; *Sci. l. c.* p. 104.

Native name *Garuk*, Hübner.

Male and female, exactly alike, of this excellent new species.

15. *MONARCHA ALECTO*, Temm.; *Sci. l. c.* p. 100.

Piezorhynchus rufolateralis, Gray, ♀.

Native name *Nolor* (♂ and ♀), Hübner.

One male and two females, exactly like specimens from Halmahera (Gilolo).

16. *RHIPIDURA TRICOLOR*, Vieill.

Sauloprocta melaleuca, Quoy, *Sci. l. c.* p. 99.

Native name *Napali*, Hübner.

Male and female alike, exactly agreeing with specimens from Mysol and Aru.

17. *RHIPIDURA SETOSA*, Quoy et Gaim.; *Sci. l. c.* p. 99.

Native name *Torotorotumbuan*, Hübner.

Male and female.

18. *LALAGE KARU*, Less.; *Sci. l. c.* p. 101.

Native name *Nakior*, Hübner.

Male and female. The male has the upper portion of the rump pure white, the lower portion black with greyish-white tips, giving a wavy appearance; the upper tail-coverts are brownish grey. The female has the upper parts, including the rump, umber-brown instead of black; the rufous tinge on the vent and lower tail-coverts is paler.

19. *CALORNIS NITIDA*, Gray; *Sci. l. c.* p. 104.

C. viridescens, Gray, P. Z. S. 1858, p. 181.

Native name *Nallowut*, Hübner.

Male and female, both exactly alike, and one young male, with plumage beneath furnished with dark longitudinal stripes.

In size and coloration (distribution and lustre of the green and violet-purplish), I see not the slightest difference in specimens from New Guinea (Dorey).

Al.	Caud.	Rostr.	
in.	in. lin.	lin.	
4	3 6	7	♂ ad., Duke of York.
4	3 4	7	„ Dorey.

20. *NASITERNA PUSIO*, *Sci.*; *Sci. l. c.* p. 108.

Native name *Pinipinatan*, Hübner.

Male and female, exactly alike.

21. PIONIAS CYANICEPS (Pach.).

Geoffroius cyaniceps, *Sci. l. c.* p. 107, et 1878, p. 672.

Native name *Binibiu*, Hübner.

One male, but no doubt a young one, as the head is still green and has no blue collar. I took this distinct species formerly for the female of *P. heteroclitus*, Hombr.

22. ECLECTUS POLYCHLORUS, Scop.; *Sci. l. c.* p. 106.

E. linnæi, Wagl. (♀).

Native name *Kalangi*, Hübner.

Three green males, agreeing exactly with specimens from Gilolo, wings 9 to 9½ inches, and two red females, wings 8" 6" to 8" 8" (also called *Kalangi* by the natives), exactly agreeing with the so-called *E. linnæi*, Wagl.

As Mr. Hübner apparently has sexed the specimens himself, his collection gives new evidence that Dr. Meyer was right in declaring the red ones to be the females of the green.

23. TRICHOGLOSSUS SUBPLACENS, *Sci.*; *Sci. l. c.* p. 108.

Native name *Nebir*, Hübner.

Two males and one female, agreeing exactly with Dr. Sclater's description.

24. CUCULUS CANORUS, L.

One specimen, *in size, colour, and markings exactly agreeing with specimens from Germany.*

25. CUCULUS INSUPERATUS, Gould; *Sci. l. c.* p. 106.

C. sonnerati (pt.), Schl.

Native name *Nevin*, Hübner.

One male specimen, agreeing with Javan specimens, but breast and vent washed only very faintly with rufous, and larger. Wings 4" 9", tail 4" 9".

26. EUDYNAMIS PICATA, S. Müll.; *Sci. l. c.* p. 106.

Native name, male, *Bakebake*; female, *Avarik*, Hübner.

Male and female.

After what the Marquis of Tweeddale has said (*Ibis*, 1869, p. 342) on the difficulties of making out what is the true "*picata*" of Solomon Müller, I follow in the determination of this species Dr. Sclater, leaving it aside whether this Koel must bear Müller's name or that of *rufiventris*, Less.

The male, altogether black, with blue lustre, agrees perfectly with Australian ones (*E. cyanocephala*), but is smaller; the female differs totally from the New-Holland one, and comes nearest to *E. malayana*, Cab., from Java. On a black-greenish shining ground-colour, the upper parts are streaked longitudinally on the head, spotted on back and wing-coverts, and barred on wings and tail with rusty brown; chin and throat are black, spotted thickly with rusty; on the gape a white longitudinal stripe; underparts of

a whitish-rusty ground-colour, more tinged with rusty on the lower throat and under tail-coverts, with distinct black cross bands much narrower than the white interspaces. Bill in both sexes greyish horn-yellow, with base of upper jaw dark.

27. *SCYTHROPS NOVÆ-HOLLANDIÆ*, Lath.

Native name *Guloko*, Hübner.

Male and female. Not recorded by Dr. Sclater.

28. *ÆDIRHINUS INSOLITUS*, Schleg.; *Scl. l. c.* p. 110.

Ædirhinus globifer, Cab. et Rehnw. Journ. f. Ornithol. 1877, tab. iv.

Native name *Tambun*, Hübner.

Male and female of this remarkable Pigeon, both alike, and with the curious *Carpophaga*-like knob on front; the male has the chin tinged faintly with bluish green.

29. *CARPOPHAGA RHODINOLÆMA*, *Scl.* (?)*

Native name *Gurekambu*, Hübner.

Male and female, precisely alike.

Dr. Sclater enumerates from Duke-of-York Island *C. van-wyckii*, Cass. The only description of it (*Proc. Acad. Sci. Philad.* xiv. 1862, p. 320) I cannot refer to, this periodical being wanting in our library. In leaving it open whether the specimens before me belong to this species or not, I find, however, that they agree very well with the above-named species, originally described by Dr. Sclater from the Admiralty Islands (*P. Z. S.* 1877, p. 555). The specimens are mostly near allied to *C. pacifica*; but the head, neck, and underparts are grey, only the sides of head, chin, and throat washed with rosy or vinous; a ring round the eye white, as pointed out in Dr. Sclater's description. Wings in male 9'' 5''', in female 8'' 9'''.

30. *CARPOPHAGA RUBRICERA*, Bp.; *Scl. l. c.* p. 109.

Native name *Guré*, Hübner.

Male and female; both alike.

31. *MACROPYGIA DOREYA*, Bp. *Consp. Av.* ii. p. 57.

? *M. carteretia*, *Scl. l. c.* p. 111.

Native name *Tokuo*, Hübner.

One old male, in bad condition, which I refer to this dark-billed species, and not to *M. carteretia*, Bp., as in that the bill is said to be yellow. *M. nigrirostris*, Salvad., which Dr. Sclater also enumerates among the birds of Duke-of-York Island, seems, according to his measurements, considerably smaller.

32. *CHALCOPHAPS STEPHANI*, Puch.; *Scl. l. c.* p. 111.

Native name *Nauvat*, Hübner.

Male and female, differing as noticed by Dr. Sclater.

* See remarks by Mr. Sclater, March 4th, *infra*.

33. *CALCENAS NICOBARICA*, L. ; *Sci. l. c.* p. 112.

Native name *Purreparre*, Hübner.

Male and female, agreeing with specimens from the Moluccas.

34. *MEGAPODIUS EREMITA*, Hartl. *P. Z. S.* 1867, p. 830 (Echiquier Islands).

M. hueskeri, *Cab. et Rehnw. Journ. f. Orn.* 1876, p. 326 (New Hanover) ; *Sci. l. c.* p. 113 (Duke-of-York Island).

M. rubrifrons, *Sci. P. Z. S.* 1877, p. 556 (Admiralty Islands).

Native name *Kakiau*, Hübner.

Male and female in size and coloration alike. Wings 8'' 6'''. In dried skins: tarsus brownish (in the female more yellowish brown towards the knee) ; toes and nails brownish black.

Dr. Salvadori, to whom I forwarded the type specimen from the Museum Godeffroy for comparison, pronounces (*in litt.*) the three species referred to above undoubtedly inseparable from each other, and identical with Hartlaub's type from Echiquier Islands.

35. *ARDEA SACRA*, Gmel. ; *Sci. l. c.* p. 112.

Native name *Ambar*, Hübner.

One female, in slate-black plumage.

36. *ARDEA FLAVICOLLIS*, Lath. ; *Sci. l. c.* p. 113.

Native names, male *Nakak*, female *Ambar*, young *Kakuk*, Hübner.

Old male, female, and young bird. The old male agrees perfectly with a Malaccan one. Wings 8'' ; female, wings 7'' 8''.

I do not think that a specific separation of the Australian *A. gouldi*, Bp., on account of the larger size, is exactly to be relied upon.

37. *NYCTICORAX CALEDONICUS*, Gmel. ; *Sci. l. c.* 1878, p. 673.

Native name *Anglema*, Hübner.

Two males ; wings 9'' 9''.

38. *STREPSILAS INTERPRES*, L.

Native name *Aulie*, Hübner.

One specimen.

39. *ESACUS MAGNIROSTRIS*, Geoff.

Native name *Kalubibil*, Hübner.

One male. New for this locality.

40. *CHARADRIUS FULVUS*, Gmel. ; *Sci. l. c.* p. 113.

Native name *Natewabun*, Hübner.

Two specimens ; one with the underparts black intermixed with some white feathers.

41. *NUMENIUS UROPYGIALIS*, Gould ; *Sci. l. c.* p. 113.

Native name *Kakang*, Hübner.

Male and female. All the Eastern specimens have the rump strongly barred, and apparently deserve specific separation.

42. *ACTITIS INCANA* (Gmel.) ; *Sci. l. c.* p. 113.

Native name *Fuvik*, Hübner.

One specimen.

43. *ACTITIS HYPOLEUCA* (L.) ; *Sci. l. c.* p. 113.

Native name *Fuvia*, Hübner.

Two specimens.

44. *STERNA BERGII*, Licht.

Native name *Aururepika*, Hübner.

One specimen, a not full-grown fledgling.

45. *STERNA LONGIPENNIS*, Nordm.

Native name *Ganaibowo*, Hübner.

Two old males, agreeing in every respect with Baikal specimens.

46. *STERNA FULIGINOSA*, Gmel. ; *Sci. l. c.* p. 113.

Native name *Ganaiboro*, Hübner.

One young bird.

47. *ANOUS STOLIDUS* (L.) ; *Sci. l. c.* p. 113.

Native name *Ganaiboro*, Hübner.

One old specimen.

48. *PROCELLARIA NEGLECTA*, Schleg. *Mus. P.-B. Procell.* p. 10.

Native name *Ururu*, Hübner.

One specimen.

Mr. Salvin, to whom I sent the specimen for comparison, kindly writes to me :—"Compared with a specimen of *Procellaria neglecta*, Schl., in my collection from the Kermadec Islands, the head is a little lighter ; and it has rather more white on the base of the wing-feathers than a specimen from the same collection as the type of *P. neglecta*, Schl. The bill slightly longer. Not otherwise different in my opinion."

As the white basal portion of the plumage, so conspicuous chiefly on the inner web of wings, is not mentioned by Prof. Schlegel, and on account of the rarity of this species, I think it better to give a full description.

In form this species, with its stout bill, seems nearest allied to *P. fuliginosa*, Kuhl. On account of the mottled appearance the specimen looks like an immature bird ; and the suggestion may be allowed that the old bird will have the head, neck, and underparts uniform white.

Head, neck, and under surface white, nearly all the feathers washed at the tips with pale brownish, giving the head above, the neck, and the sides of the body a pale brown wash ; front, sides of head, throat, and middle of the underparts more pure and uniform white ; under tail-coverts brown, with white basal portion ; back, shoulders, wing-coverts, and remainder of upper parts dark brown, each feather white at the basal half, some of the shoulder- and smaller wing-

coverts worn off at the tips, and therefore with paler margins; wings dark brown, like the back, over the greater portion of the inner web pure white; shafts, to about the apical third, also white; wings from below white, tipped with brown, as are the under wing-coverts; tail-feathers dark brown, the basal portion of the inner web white; bill black; feet pale, the toes and webs black to about the apical third.

Long. tot. in.	Al. in.	Caud. in. lin.	Rostr.		Tars. lin.	Dig. med. lin.
			culm. lin.	alt. lin.		
c. 15	10	3 7	14	6	17½	21

49. PROCELLARIA LEUCOPTERA, Gould.

Native name *Laguna-kikina*, Hübner.

One specimen.

On this Mr. Salvin also gives me the following kind remarks:—
“Your specimen from Duke-of-York Island is certainly *Æstrelata leucoptera*, Gould, of which I have a typical specimen, obtained from Gould himself. Your bird is slightly clearer, greyer on the back and rump, and has a more slender bill at the base, the difference being very little indeed.”

The well-marked dark (nearly black) cross band on the rump, which Prof. Schlegel does not mention, induced me to believe it might be new; but as our first authority with respect to *Procellariidæ* tells me that I am wrong, I cannot do better than follow him.

50. PUFFINUS LEUCOMELAS, Temm.

Native name *Kitai*, Hübner.

One specimen, exactly like specimens from Amboina.

51. PUFFINUS TENUIROSTRIS, Temm.; Finsch, Journ. f. Orn. 1874, p. 210.

Native name *Kipoli*, Hübner.

One specimen, agreeing exactly with the figure in the ‘Fauna Japonica’ (tab. 86).

52. DYSPORUS SULA (L.).

Sula fusca, Vieill.

Native name *Manemantoura*, Hübner.

Three specimens, among them a nearly uniformly brown young bird.

From New Britain.

1. CORVUS ENCA, Horsf.

Corvus, sp. inc., Sel. l. c. p. 104.

Native name *Garnik*, Hübner.

One specimen, which I am not able to distinguish from a Javan one, as the differences in size are very slight.

Al.	Caud.	Rostr.	Tars.	
in. lin.	in. lin.	lin.	lin.	
11 9	5 6	23	23	New Britain.
11 3	5 11	23	25	Java.

2. *GRACULA KREFFTI*, Scl. *l. c.* p. 104.

Native name *Giljau*, Hübner.

Male and female, showing no differences.

The figure given with the original description (P. Z. S. 1869, pl. ix.) shows, in contrast to the description, the upper and lower tail-coverts yellow instead of white, and gives therefore quite a wrong idea; only the middle of the vent near the anal region is yellow (orange-yellow).

3. *BUCEROS RUFICOLLIS*, Vieill.; Scl. P. Z. S. 1878, p. 672.

Native name *Ngal*, Hübner.

One old and one young female (sex marked by Mr. Hübner) both having the whole head and neck uniform black, like the body. The old female shows on the basal half of the culmen five strongly developed plicæ, the basal one measuring 17 lines in length and 18 in diameter, being flat from above; the young one lacks the plicæ, and shows only a small elevated (about 6''') flat casque, 2'' 4''' in length and 16''' in diameter.

4. *PLICTOLOPHUS OPHTHALMICUS* (Scl.).

Cacatua ophthalmica, Scl. P. Z. S. 1877, p. 107.

Native name *Moal*; iris brown, Hübner.

Male and female alike.

5. *DOMICELLA HYPÆNOCHROA*, Gray.

Lorius hypænochrous, Scl. *l. c.* p. 108.

Native name *Kulinga*, Hübner.

Two specimens, which have been kept in confinement.

6. *CENTROPUS ATERALBUS*, Less.; Scl. *l. c.* p. 106.

Native name *Kumkum*, Hübner.

One old male. The white "speculum" on the wings is formed by the tectrices of the primaries, which are white; the white of head and neck is washed pale ochre-yellowish. Al. 8'', caud. 10'', rostr. a front. 17''', tars. 21'''.
 One specimen.

7. *CARPOPHAGA SPILORRHOA*, Gray; Scl. *l. c.* p. 109.

Native name *Ngelangele*, Hübner.

One specimen.

Dr. Sclater enumerates this species from Duke-of-York Island.